UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

Office of Air and Radiation

Open Letter to the Motor Vehicle Air Conditioning Industry June 1, 1998

I am writing to announce that as of June 1, 1998, EPA will allow recycling of refrigerant blends used in motor vehicle air conditioning systems (MVACS), provided that a) recycling equipment meets a new Underwriters Laboratories (UL) standard and b) refrigerant is returned to the vehicle from which it was removed.

As you know, EPA has worked closely with the industry to ensure the purity of recycled CFC-12 and HFC-134a as provided by strict adherence to standards first established voluntarily by the Society of Automotive Engineers (SAE) and later incorporated into EPA regulations. In contrast, because such standards did not exist for blend refrigerants, technicians could recover them and send them to a reclaimer, but they could not recycle such blends. As explained in a letter to refrigerant manufacturers dated October 16, 1996:

"Service shops may either recover HFC-134a or recycle it using special recycling equipment in the shop. Currently, however, it is not legal to recycle any other alternative MVAC refrigerant. EPA's policy is that until a standard for equipment designed to recycle a particular refrigerant is published and available (by EPA or an industry organization like SAE or UL), then it is illegal to recycle that refrigerant."

EPA has worked with UL and the MVAC industry since that letter was sent to develop a standard for blend recycling equipment. On May 29, 1998, UL adopted Standard 2954: Recover/Recycling Equipment and announced that it will accept equipment for certification testing. UL also solicited any additional comments that might be appropriate; if, after receiving comments, UL publishes an amended Standard, the new version will govern equipment certification Standard 2964 includes numerous requirements for recycling equipment to guarantee that recycled blend refrigerant is similar in purity to recycled CFC-12 or HFC-134a. EPA believes that recycling equipment meeting this Standard will adequately remove oil, water, and other impurities. Under this Standard, technicians will follow similar procedures for recycling pure refrigerants, such as CFC-12 and HFC-134a, and blend refrigerants.

However, one key difference between pure refrigerants and blends is that blends may fractionate, meaning that it is impossible to predict in advance what composition will remain in the system after a leak. Because there is no means to guarantee the proper composition of a recycled blend, EPA believes it is appropriate to recharge such refrigerant only into the original vehicle. EPA is not allowing recycled blend refrigerant to be recharged into a vehicle other than the one from which it was removed. The only exception is for fleets of vehicles with a common owner, recycled blend refrigerant may be moved among vehicles within such a fleet.

In summary, it is now legal to recycle blend refrigerants used in MVACS using equipment certified to meet UL 2964, provided that refrigerant is returned to the original vehicle. Under the Significant New Alternatives Policy (SNAP) program, EPA has provided consumers with numerous options to replace CFC-12, and this new policy will ease the servicing of vehicles using blend refrigerants. If you have questions about blend recycling, please contact Christine Dibble of my staff at 202-564-9147

Sincerely, /S/
Drusilla Hufford, Director